National 911 Resource Center

Profile Database Data Dictionary

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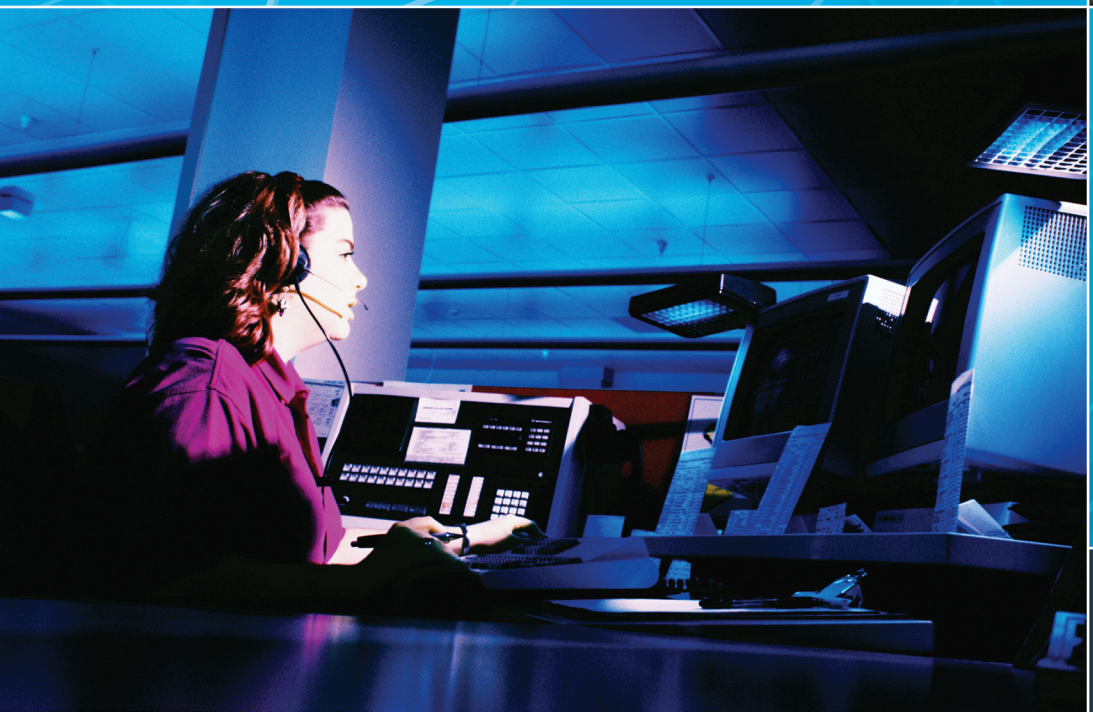

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NATIONAL 911 RESOURCE CENTER

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The National 911 Resource Center (NRC) is operated by Booz Allen Hamilton, Inc. under contract with the National Highway Traffic Safety Administration's (NHTSA) National 911 Program of the United States Department of Transportation (USDOT).

The goals of the NRC are to provide useful information and resources to public safety answering points (PSAPs) and 911 Authorities, and to monitor the progress of 911 Authorities across the United States in implementing more advanced 911 systems based upon next generation networks and facilities.

CONTENTS

1. ACRONYMS LIST

The table below includes acronyms used throughout the data dictionary.

Acronym	Definition
ALI	Automatic Location Identification
ANI	Automatic Number Identification
BCF	Border Control Function
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name System
E911	Enhanced 911
ECRF	Emergency Call Routing Function
ESInet	Emergency Services IP network
ESRP	Emergency Services Routing Proxy
FCC	Federal Communications Commission
GIS	Geographic Information Systems
IP	Internet Protocol
LOS	Level of Service
LoST	Location-to-Service Translation Protocol
MLTS	Multi-line Telephone System
NENA	National Emergency Number Association
NG911	Next Generation 911
NHTSA	National Highway Traffic Safety Administration
NRC	National 911 Resource Center
PSAP	Public Safety Answering Point
RFP	Request for Proposal
SR	Selective Router
USDOT	United States Department of Transportation
VoIP	Voice Over Internet Protocol
WPI	Wireless Phase I
WPII	Wireless Phase II

2. INTRODUCTION AND PURPOSE

The purpose of the National 911 Resource Center (NRC) is to provide useful information, tools, and resources to the 911 community. The NRC operates and maintains a "National 911 Profile Database" for collecting and compiling data which can be used to measure and report on the progress of 911 Authorities in enhancing their existing systems and implementing more advanced 911 systems based upon next generation networks and facilities.

The National 911 Profile Database relies upon the use of an online questionnaire which enables data submission by the 50 states, the District of Columbia, Puerto Rico, and the U.S. Territories (Guam, American Samoa, Mariana Islands, U.S. Virgin Islands, and U.S. Minor Outlying Islands). Data submission is voluntary but all state and territorial authorities are encouraged to participate. The goal of the data collection and evaluation process is to accurately measure and depict the current status and planned capabilities of 911 systems across the United States. Previous documents have provided guidance related to the collection, processing, evaluation, and presentation of these 911 data. Aggregate data have also been compiled in a document entitled, "The National 911 Progress Report," and have been combined with another data set in a report entitled, "Review of Nationwide 911 Data Collection."

In developing the online questionnaire, "data elements" were identified that reflected valuable and useful information for stakeholders and data which supported the purposes and functions of the NRC and the National 911 Program. To help ensure accurate and consistent data reporting and collection, members of the NRC team responsible for database and website development created a "data dictionary" from the list of data elements originally developed by the National Association of State 911 Administrators (NASNA). The purpose of the data dictionary is to provide a clear definition of the data elements included in the National 911 Profile Database, and the parameters for filling out and submitting data using the online questionnaire. This document can be referenced by reporting entities as they collect and submit data to the National 911 Profile Database.

This data dictionary contains tables that define each data element and provide a description of the information being requested from reporting entities. Each data element table includes the following characteristics:

- **Data Element Number:** A unique number assigned to the data element
- **Name:** The title assigned to the data element
- **DEName:** The database column name (or component) corresponding to the data element involved
- **Data Type:** The database data type corresponding to the data element involved (i.e., number, text, drop down)
- **Size:** The size (in bytes) allowed by the data type of the data element involved
- **Form Input Type:** The corresponding reporting Web-based form and the interactive element involved
- **Definition:** A narrative description of the data element
- **Instructions:** Any reporting instructions associated with the data element
- **Question to User:** The text that will be used on the online questionnaire itself

3. DATA DICTIONARY

3.1 Baseline Data Elements

The "baseline" data elements reflect the current status and nature of 911 operations existing in states and territories. These elements are largely descriptive in nature and are intended to provide a general view of the status of 911 services across the country. They are organized into three categories, or groups: administrative, system, and fiscal data.

3.1.1 Data Element Group: Administrative Data

3.1.1.1 Year for which Data is Being Reported by Reporting State

Data Element Number	3.1.1.1
Name	Year for which Data is Being Reported by Reporting State
DEName	ReportingPeriod
Data Type	VarChar(4)
Size (bytes)	4
Form Input Type	Drop-down List
Definition	The calendar year (January 1 through December 31) on which information or data was initially entered and/or updated. Data entered for a particular calendar year must apply to that calendar year. In addition to that date, the system will automatically maintain a history of changes to data elements, up to and including the last update. This is important because it indicates how old the information in the database is. It is recognized that fiscal data entered may reflect a reporting state's fiscal year and not a calendar year.
Instructions	Select the Calendar Year involved
Question to User	Select the year for which Data is being reported by your State

3.1.1.2 Public Availability of State Data

Data Element Number	3.1.1.2
Name	Public Availability of State 911 Data
DEName	*PubliclyAvailable*
Data Type	*bit*
Size (bytes)	*1*
Form Input Type	Drop-down List (Yes or No)
Definition	This element asserts that a state's 911 data are or are not available to the public
Instructions	"Publicly available" means posted on your State/county website, included in a publicly-available written report, or available to individuals upon request. Select "Yes" if State 911 data are available to the public in any way; select "No" if data are not available to the public.
Question to User	Is your data publicly available?

3.1.2 Data Element Group: System Data

3.1.2.1 Total Number of 911 Calls Delivered, Based on Local and Regional 911 Authority Data, and Aggregated at the State Level

Data Element Number	3.1.2.1
Name	Total Number of 911 Calls Delivered, Based on Local and Regional 911 Authority Data, and Aggregated at the State Level
DEName	TotalCalls
Data Type	BigInt
Size (bytes)	8
Form Input Type	Textbox (valid number between 0 and 99,999,999)
Definition	Total number of calls delivered to 911 Authorities for the calendar year, aggregated to the State level
Instructions	Enter the total number of calls delivered to "primary" PSAPs, even if not answered or no dispatch occurred. NENA defines "primary" PSAPs as "a PSAP to which 911 calls are routed directly from the 911 control office."[1]
Question to User	Enter the total number of 911 calls delivered to "primary" PSAPs in your State, even if not answered or no dispatch occurred

3.1.2.2 Data Element Sub-Group: Call Volume by Type

3.1.2.2.1 Number of Wireline Calls

Data Element Number	3.1.2.2.1
Name	Number of Wireline Calls
DEName	TotalCallsWireline
Data Type	BigInt
Size (bytes)	8
Form Input Type	Textbox (valid number between 0 and 99,999,999)
Definition	Number of incoming wireline calls, aggregated to the State level
Instructions	Enter the number of wireline calls delivered to "primary" PSAPs in your State, even if not answered or no dispatch occurred
Question to User	Enter the number of incoming wireline calls delivered to "primary" PSAPs in your State, even if not answered or no dispatch occurred. If the total number is unknown, check the "Unknown" box.

[1] NENA Master Glossary of 911 Terminology, NENA ADM-000.17, September 9, 2013, p. 98, http://c.ymcdn.com/sites/www.nena.org/resource/collection/625EAB1D-49B3-4694-B037-8E854B43CA16/NENA-ADM-000.17_Master_Glossary_20130909.pdf.

3.1.2.2.2 Number of Cellular Calls

Data Element Number	3.1.2.2.2
Name	Number of Cellular Calls
DEName	TotalCallsCellular
Data Type	BigInt
Size (bytes)	8
Form Input Type	Textbox (valid number between 0 and 99,999,999)
Definition	Number of incoming cellular calls, aggregated to the State level
Instructions	Enter the number of cellular calls delivered to “primary” PSAPs in your State, even if not answered or no dispatch occurred
Question to User	Enter the number of incoming cellular calls delivered to “primary” PSAPs in your State, even if not answered or no dispatch occurred. If the total number is unknown, check the “Unknown” box.

3.1.2.2.3 Number of Voice over Internet Protocol (VoIP) Calls

Data Element Number	3.1.2.2.3
Name	Number of Voice over Internet Protocol (VoIP) Calls
DEName	TotalCallsVoIP
Data Type	BigInt
Size (bytes)	8
Form Input Type	Textbox (valid number between 0 and 99,999,999)
Definition	Number of incoming VoIP calls, aggregated to the State level
Instructions	Enter the number of VoIP calls delivered to “primary” PSAPs in your State, even if not answered or no dispatch occurred
Question to User	Enter the number of incoming VoIP calls delivered to “primary” PSAPs in your State, even if not answered or no dispatch occurred. If the total number is unknown, check the “Unknown” box.

3.1.2.2.4 Number of Multi-line Telephone System (MLTS) Calls

Data Element Number	3.1.2.2.4
Name	Number of Multi-line Telephone System (MLTS) Calls
DEName	TotalCallsMLTS
Data Type	BigInt
Size (bytes)	8
Form Input Type	Textbox (valid number between 0 and 99,999,999)
Definition	Number of incoming MLTS calls, aggregated to the State level
Instructions	Enter the number of MLTS calls received, even if not answered or no dispatch occurred
Question to User	Enter the number of incoming MLTS calls received, even if not answered or no dispatch occurred. If the total number is unknown, check the “Unknown” box.

3.1.2.2.5 Number of Text-to-911 Messages

Data Element Number	3.1.2.2.5
Name	Number of Text-to-911 Messages
DEName	TotalText
Data Type	BigInt
Size (bytes)	8
Form Input Type	Textbox (valid number between 0 and 99,999,999)
Definition	Number of incoming texts-to-911, aggregated to the State level
Instructions	Enter the number of texts-to-911 delivered to “primary” PSAPs in your State, even if not answered or no dispatch occurred
Question to User	Enter the number of incoming texts-to-911 delivered to “primary” PSAPs in your State, even if not answered or no dispatch occurred. If the total number is unknown, check the “Unknown” box.

3.1.2.3 Total Number of Sub-State 911 Authorities in a State

Data Element Number	3.1.2.3
Name	Total Number of Sub-State 911 Authorities in a State
DEName	TotalAuth
Data Type	Int
Size (bytes)	4
Form Input Type	Textbox (valid number between 0 and 9,999)
Definition	The number of sub-State 911 Authorities having responsibility for planning, coordinating, funding, and supporting 911 in their respective jurisdictions. Most 911 Authorities will have a Board or equivalent body that oversees 911 for its geographic area or jurisdiction. 911 Authorities are organizations, agencies, or entities that are responsible for 911 service operations, and are typically a county, parish, municipality, Council of Government, or special 911 or emergency communications district authority. 911 Authorities are not synonymous with PSAPs; 911 Authorities typically manage/operate one or more PSAPs.
Instructions	If there are sub-State 911 Authorities as defined above, enter the number of sub-State 911 Authorities. Please do not confuse number of sub-State 911 Authorities with number of PSAPs. In most states, 911 Authorities will be differentiated from PSAPs, although in some states, they may be the same. If your State does not have sub-State 911 Authorities, and the State 911 Authority is the sole 911 Authority within your State, enter “0.”
Question to User	Enter the number of sub-State 911 Authorities in your State

3.1.2.4 Data Element Sub-Group: Level of Service (LOS) Provided/Available, and Organized by Sub-State 911 Authority

3.1.2.4.1 No 911 Authority – Calls to 911 are Remote Call Forwarded Only

Data Element Number	3.1.2.4.1
Name	No 911 Authority – Calls to 911 are Remote Call Forwarded Only
DEName	TotalCountiesNo911Auth
Data Type	Int
Size (bytes)	4
Form Input Type	Textbox (valid number between 0 and 9,999)
Definition	The number of counties where there is no 911 service and where the telecommunications service providers, in compliance with the Federal Communications Commission's (FCC) Fifth Report & Order, direct 911 calls to a PSAP in areas where one has been designated or, in areas where a PSAP has not been designated, to an existing statewide default answering point or another appropriate local emergency authority. The intent of this Order was to ensure that all 911 calls would get answered. These types of arrangements do not use dedicated 911 trunks. Carriers comply by using remote call forwarding. Remote call forwarding simply forwards a 911 call to a 10-digit telephone number, usually an existing emergency telephone number for the local or county law enforcement agency. This arrangement does not constitute 911 "service."
Instructions	Only include those counties that have no 911 Authority. 911 Authorities are organizations, agencies, or entities that are responsible for providing 911 services, and are typically a county, parish, municipality, Council of Government, or special 911 or emergency communications district authority. 911 Authorities are not synonymous with PSAPs; 911 Authorities manage PSAPs. If you cannot obtain this information from sub-State entities (i.e., you lack the legal/statutory authority, or lack the necessary resources to accomplish this task), the appropriate response is "Unknown."
Question to User	Enter the number of counties in your State that have no 911 Authority – calls to 911 are remote call forwarded to an answering point

3.1.2.4.2 Number of 911 Authorities Where LOS is Limited to Basic 911

Data Element Number	3.1.2.4.2
Name	Number of 911 Authorities Where LOS is Limited to Basic 911
DEName	LOSAuthBasic
Data Type	Int
Size (bytes)	4
Form Input Type	Textbox (valid number between 0 and 9,999)
Definition	The number of 911 Authorities where the "level of service" (LOS) is limited to Basic 911. NENA defines Basic 911 as, "An emergency telephone system which automatically connects 911 callers to a designated answering point. Call routing is determined by originating central office only. Basic 911 may or may not

	support ANI (automatic number identification) and/or ALI (automatic location identification)."[2]
Instructions	Only include those 911 Authorities that are limited to Basic 911. 911 Authorities are organizations, agencies, or entities that are responsible for providing 911 services, and are typically a county, parish, municipality, Council of Government, or special 911 or emergency communications district authority. 911 Authorities are not synonymous with PSAPs; 911 Authorities manage PSAPs. If you cannot obtain this information from sub-State entities (i.e., you lack the legal/statutory authority, or lack the necessary resources to accomplish this task), the appropriate response is "Unknown."
Question to User	Enter the number of 911 Authorities in your State that are limited to Basic 911

3.1.2.4.3 Number of 911 Authorities with Enhanced 911 LOS

Data Element Number	**3.1.2.4.3**
Name	Number of 911 Authorities with Enhanced 911 LOS
DEName	LOSAuthEnhanced
Data Type	Int
Size (bytes)	4
Form Input Type	Textbox (valid number between 0 and 9,999)
Definition	The number of 911 Authorities where the LOS is limited to Enhanced 911 (E911) service with ANI & ALI only and without Phase I or II location data. NENA defines E911 as, "A telephone system which includes network switching, data base and Public Safety Answering Point premise elements capable of providing automatic location identification data, selective routing, selective transfer, fixed transfer, and a call back number. The term also includes any E911 service so designated by the FCC in its Report and Order in WC Docket Nos. 04-36 and 05-196, or any successor proceeding."[3]
Instructions	Include all 911 Authorities whose LOS is Enhanced 911. 911 Authorities are organizations, agencies, or entities that are responsible for providing 911 services, and are typically a county, parish, municipality, Council of Government, or special 911 or emergency communications district authority. 911 Authorities are not synonymous with PSAPs; 911 Authorities manage PSAPs. If you cannot obtain this information from sub-State entities (i.e., you lack the legal/statutory authority, or lack the necessary resources to accomplish this task), the appropriate response is "Unknown."
Question to User	Enter the number of 911 Authorities in your State limited to Enhanced 911

[2] NENA Master Glossary of 911 Terminology, NENA ADM-000.17, September 9, 2013, p. 23, http://c.ymcdn.com/sites/www.nena.org/resource/collection/625EAB1D-49B3-4694-B037-8E854B43CA16/NENA-ADM-000.17_Master_Glossary_20130909.pdf.
[3] Ibid., p. 53.

3.1.2.4.4 Number of 911 Authorities Limited to Wireless Phase I (WPI) LOS

Data Element Number	3.1.2.4.4
Name	Number of 911 Authorities Limited to Wireless Phase I (WPI) LOS
DEName	LOSAuthWPHI
Data Type	Int
Size (bytes)	4
Form Input Type	Textbox (valid number between 0 and 9,999)
Definition	The number of 911 Authorities that are capable of processing Wireless Phase I LOS calls as the highest level of service available, but not capable of Wireless Phase II LOS. NENA defines Wireless Phase I as, "Required by FCC Report and Order 96-264 pursuant to Notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 911 call with callback number and identification of the cell-tower from which the call originated. Call routing is usually determined by cell sector."[4]
Instructions	Only include those 911 Authorities that provide Wireless Phase I as the highest level of 911 service available, but not those 911 Authorities that provide Wireless Phase II. This specifically addresses PSAP capability, not wireless service provider capability. 911 Authorities are organizations, agencies, or entities that are responsible for providing 911 services, and are typically a county, parish, municipality, Council of Government, or special 911 or emergency communications district authority. 911 Authorities are not synonymous with PSAPs; 911 Authorities manage PSAPs. If you cannot obtain this information from sub-State entities (i.e., you lack the legal/statutory authority, or lack the necessary resources to accomplish this task), the appropriate response is "Unknown."
Question to User	Enter the number of 911 Authorities in your State that provide Wireless Phase I (WPI) level of service, but do not provide Wireless Phase II (WPII) level of service

3.1.2.4.5 Number of 911 Authorities Limited to Wireless Phase II (WPII) LOS

Data Element Number	3.1.2.4.5
Name	Number of 911 Authorities Limited to Wireless Phase II (WPII) LOS
DEName	LOSAuthWPHII
Data Type	Int
Size (bytes)	4
Form Input Type	Textbox (valid number between 0 and 9,999)
Definition	The number of 911 Authorities that are capable of processing Wireless Phase II LOS calls as the Highest LOS available. NENA defines Wireless Phase II as, "Required by FCC Report and Order 96-264 pursuant to Notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 911 call with Phase I requirements, plus location of the caller within 125 meters 67% of the time and

[4] Ibid.. p. 136.

	Selective Routing based upon those coordinates. Subsequent FCC rulings have redefined the accuracy requirements."[5]
Instructions	Include all 911 Authorities that provide Wireless Phase II LOS as the highest level of service available. This specifically addresses PSAP capability, not wireless service provider capability. 911 Authorities are organizations, agencies, or entities that are responsible for providing 911 services, and are typically a county, parish, municipality, Council of Government, or special 911 or emergency communications district authority. 911 Authorities are not synonymous with PSAPs; 911 Authorities manage PSAPs. If you cannot obtain this information from sub-State entities (i.e., you lack the legal/statutory authority, or lack the necessary resources to accomplish this task), the appropriate response is "Unknown."
Question to User	Enter the number of 911 Authorities in your State that provide Wireless Phase II level of service as the Highest LOS Available

3.1.2.4.6 Number of 911 Authorities that Provide Enhanced 911 LOS for VoIP

Data Element Number	**3.1.2.4.6**
Name	Number of 911 Authorities that Provide Enhanced 911 LOS for VoIP
DEName	LOSAuthVoIP
Data Type	Int
Size (bytes)	4
Form Input Type	Textbox (valid number between 0 and 9,999)
Definition	The number of 911 Authorities that provide E911 LOS for VoIP. NENA defines VoIP as, "Provides distinct packetized voice information in digital format using the Internet Protocol. The Internet Protocol (IP) address assigned to the user's telephone number may be static or dynamic."[6] This category assumes the 911 Authority provides a LOS that includes E911 for landline subscribers, Wireless Phase I and II to wireless subscribers.
Instructions	Only include those 911 Authorities that provide E911 for VoIP users. 911 Authorities are organizations, agencies, or entities that are responsible for providing 911 services, and are typically a county, parish, municipality, Council of Government, or special 911 or emergency communications district authority. 911 Authorities are not synonymous with PSAPs; 911 Authorities manage PSAPs. If you cannot obtain this information from sub-State entities (.i.e., you lack the legal/statutory authority, or lack the necessary resources to accomplish this task), the appropriate response is "Unknown."
Question to User	Enter the number of 911 Authorities in your State that provide E911 level of service for VoIP

[5] Ibid., p. 137.

[6] Ibid., p. 134.

3.1.2.5 Data Element Sub-Group: Percentage of Population and Land Area Served by Each Defined LOS

3.1.2.5.1 Percentage of Population with No 911 Authority – Calls to 911 are Remote Call Forwarded

Data Element Number	3.1.2.5.1
Name	Percentage of Population with No 911 Authority – Calls to 911 are Remote Call Forwarded
DEName	PercentPopNo911Auth
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of the state's population residing in counties where there is no 911 service and where the telecommunications companies, in compliance with the FCC's Fifth Report & Order, direct 911 calls to a PSAP in areas where one has been designated or, in areas where a PSAP has not been designated, to an existing statewide default answering point or another appropriate local emergency authority. The intent of this Order was to ensure that all 911 calls would get answered. These types of arrangements do not use dedicated 911 trunks. Carriers comply by using remote call forwarding. Remote call forwarding simply forwards a 911 call to a 10-digit telephone number, usually an existing emergency telephone number for the local or county law enforcement agency. This arrangement does not constitute 911 "service."
Instructions	Population should reflect the most recent US decennial census. For the sake of consistency, interim population projections and/or other sources of population data should not be used. The "No 911 Authority" category refers to the percentage of the population that is supported only through arrangements based on the FCC Fifth Report & Order. If the entire state's population has a 911 Authority responsible for providing 911 services, enter "0."
Question to User	Enter the percentage of population served with no 911 Authority – calls to 911 are remote call forwarded to an answering point

3.1.2.5.2 Percentage of Population Served by 911 Authorities with Basic 911 LOS Only

Data Element Number	3.1.2.5.2
Name	Percentage of Population Served by 911 Authorities with Basic 911 LOS Only
DEName	LOSPopBasic
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of population served by 911 Authorities limited to Basic 911 LOS only. NENA defines Basic 911 as, "An emergency telephone system which automatically connects 911 callers to a designated answering point. Call routing is determined by originating central office only. Basic 911 may or may not support ANI and/or ALI."[7]
Instructions	Population should reflect the most recent US decennial census. For the sake of

[7] Ibid., p. 23.

	consistency, interim population projections and/or other sources of population data should not be used. Responding “100” means the entire population is served only by Basic 911 LOS. Responding “0” means none of the population is served only by Basic 911 LOS.
Question to User	Enter the percentage of population served by 911 Authorities with Basic 911 LOS only

3.1.2.5.3 Percentage of Population Served by 911 Authorities that Provide Enhanced 911 LOS

Data Element Number	**3.1.2.5.3**
Name	Percentage of Population Served by 911 Authorities that Provide Enhanced 911 LOS
DEName	LOSPopEnhanced
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of population served by 911 Authorities limited to Enhanced 911 LOS with ANI & ALI only and without Phase I or II location data. NENA defines E911 as, “A telephone system which includes network switching, data base and Public Safety Answering Point premise elements capable of providing automatic location identification data, selective routing, selective transfer, fixed transfer, and a call back number. The term also includes any E911 service so designated by the Federal Communications Commission in its Report and Order in WC Docket Nos. 04-36 and 05-196, or any successor proceeding.”[8]
Instructions	Population should reflect the most recent US decennial census. For the sake of consistency, interim population projections and/or other sources of population data should not be used. Responding “100” means the entire population is served only by E911 LOS. Responding “0” means none of the population is served only by E911 LOS.
Question to User	Enter the percentage of population served by 911 Authorities that are limited to providing Enhanced 911 LOS

3.1.2.5.4 Percentage of Population Served by 911 Authorities that are Limited to Providing Wireless Phase I (WPI) LOS

Data Element Number	**3.1.2.5.4**
Name	Percentage of Population Served by 911 Authorities that are Limited to Providing Wireless Phase I (WPI) LOS
DEName	LOSPopWPHI
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of population served by 911 Authorities that provide Phase I LOS, but not Wireless Phase II LOS. NENA defines Wireless Phase I as, “Required by FCC Report and Order 96-264 pursuant to Notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 911 call with callback number and

[8] Ibid., p. 53.

	identification of the cell-tower from which the call originated. Call routing is usually determined by cell sector."[9]
Instructions	Population should reflect the most recent US decennial census. For the sake of consistency, interim population projections and/or other sources of population data should not be used. Responding "100" means the entire population is served only by Wireless Phase I LOS. Responding "0" means none of the population is served only by Wireless Phase I LOS.
Question to User	Enter the percentage of population served by 911 Authorities that are limited to providing Wireless Phase I (WPI) LOS, but do not provide Wireless Phase II LOS

3.1.2.5.5 Percentage of Population Served by 911 Authorities that are Limited to Providing Wireless Phase II (WPII) LOS

Data Element Number	3.1.2.5.5
Name	Percentage of Population Served by 911 Authorities that are Limited to Providing Wireless Phase II (WPII) LOS
DEName	LOSPopWPHII
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of population served by 911 Authorities that provide Wireless Phase II LOS. NENA defines Wireless Phase II as, "Required by FCC Report and Order 96-264 pursuant to Notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 911 call with Phase I requirements, plus location of the caller within 125 meters 67% of the time and Selective Routing based upon those coordinates. Subsequent FCC rulings have redefined the accuracy requirements."[10] This category assumes the 911 Authority provides a LOS that includes E911 for landline subscribers, Wireless Phase I and II to wireless subscribers.
Instructions	Population should reflect the most recent US decennial census. For the sake of consistency, interim population projections and/or other sources of population data should not be used. Responding "100" means the entire population is served only by Wireless Phase II LOS. Responding "0" means none of the population is served only by Wireless Phase II LOS.
Question to User	Enter the percentage of population served by 911 Authorities that provide Wireless Phase II (WPII) LOS as the Highest LOS available

[9] Ibid., p. 136.
[10] Ibid., p. 137.

3.1.2.5.6 Percentage of Population Served by 911 Authorities that Provide Enhanced 911 LOS for VoIP

Data Element Number	3.1.2.5.6
Name	Percentage of Population Served by 911 Authorities that Provide Enhanced 911 LOS for VoIP
DEName	LOSPopVoIP
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of population served by 911 Authorities limited to Wireless Phase II and VoIP LOS. NENA defines Wireless Phase I and II as defined in elements 3.1.2.5.4 and 3.1.2.5.5 above, and VoIP as, "Provides distinct packetized voice information in digital format using the Internet Protocol. The IP address assigned to the user's telephone number may be static or dynamic."[11] This category assumes the 911 Authority provides a LOS that includes E911 for landline subscribers, Wireless Phase I and II to wireless subscribers.
Instructions	Population should reflect the most recent US decennial census. For the sake of consistency, interim population projections and/or other sources of population data should not be used. Responding "100" means the entire population is served only by E911 for VoIP LOS. Responding "0" means none of the population is served by E911 for VoIP LOS.
Question to User	Enter the percentage of population served by 911 Authorities that provide Enhanced 911 LOS for VoIP

3.1.2.5.7 Percentage of Geographic Area with No 911 Authority – Calls to 911 are Remote Call Forwarded

Data Element Number	3.1.2.5.7
Name	Percentage of Geographic Area with No 911 Authority -- Calls to 911 are Remote Call Forwarded
DEName	PercentLandNo911Auth
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of geographic area with no 911 Authority is where there is no 911 service and where the telecommunications companies, in compliance with the FCC's Fifth Report & Order, direct 911 calls to a PSAP in areas where one has been designated or, in areas where a PSAP has not been designated, to an existing statewide default answering point or another appropriate local emergency authority. The intent of this Order was to ensure that all 911 calls would get answered. These types of arrangements do not use dedicated 911 trunks. Carriers comply by using remote call forwarding. Remote call forwarding simply forwards a 911 call to a 10-digit telephone number, usually an existing emergency telephone number for the local or county law enforcement agency. This arrangement does not constitute 911 "service."
Instructions	The "No 911 Authority" category refers to the percentage of geographic area that is supported only through arrangements based on the FCC Fifth Report &

[11] Ibid., p. 134.

	Order. If the entire state's geographic area is served by a 911 Authority responsible for providing 911 services, enter "0."
Question to User	Enter the percentage of geographic area with no 911 Authority – calls to 911 are remote call forwarded to an answering point

3.1.2.5.8 Percentage of Geographic Area Served by 911 Authorities with Basic 911 LOS Only

Data Element Number	3.1.2.5.8
Name	Percentage of Geographic Area Served by 911 Authorities with Basic 911 LOS Only
DEName	LOSLandBasic
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of geographic area served by 911 Authorities limited to Basic 911 LOS only. NENA defines Basic 911 as, "An emergency telephone system which automatically connects 911 callers to a designated answering point. Call routing is determined by originating central office only. Basic 911 may or may not support ANI and/or ALI."[12]
Instructions	Responding "100" means the entire geographic area is served only by Basic 911 LOS. Responding "0" means none of the geographic area is served only by Basic 911 LOS.
Question to User	Enter the percentage of geographic area served by 911 Authorities with Basic 911 LOS only

3.1.2.5.9 Percentage of Geographic Area Served by 911 Authorities that Provide Enhanced 911 LOS

Data Element Number	3.1.2.5.9
Name	Percentage of Geographic Area Served by 911 Authorities that Provide Enhanced 911 LOS
DEName	LOSLandEnhanced
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of geographic area served by 911 Authorities that are limited to providing Enhanced 911 LOS with ANI & ALI only and without Phase I or II location data. NENA defines E911 as, "A telephone system which includes network switching, data base and Public Safety Answering Point premise elements capable of providing automatic location identification data, selective routing, selective transfer, fixed transfer, and a call back number. The term also includes any E911 service so designated by the Federal Communications Commission in its Report and Order in WC Docket Nos. 04-36 and 05-196, or any successor proceeding."[13]

[12] Ibid., 23.
[13] Ibid., p. 53.

Instructions	Responding “100” means the entire geographic area is served only by E911 LOS. Responding “0” means none of the geographic area is served only by E911 LOS.
Question to User	Enter the percentage of geographic area served by 911 Authorities that are limited to providing Enhanced 911 LOS

3.1.2.5.10 Percentage of Geographic Area Served by 911 Authorities that are Limited to Providing Wireless Phase I (WPI) LOS

Data Element Number	3.1.2.5.10
Name	Percentage of Geographic Area Served by 911 Authorities that are Limited to Providing Wireless Phase I (WPI) LOS
DEName	LOSLandWPHI
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of geographic area served by 911 Authorities that provide Wireless Phase I LOS, but not Wireless Phase II LOS. NENA defines Wireless Phase I as, “Required by FCC Report and Order 96-264 pursuant to Notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 911 call with callback number and identification of the cell-tower from which the call originated. Call routing is usually determined by cell sector.”[14]
Instructions	Responding “100” means the entire geographic area is served only by Wireless Phase I LOS. Responding “0” means none of the geographic area is served only by Wireless Phase I LOS.
Question to User	Enter the percentage of geographic area served by 911 Authorities that provide Wireless Phase I (WPI) LOS, but do not provide Wireless Phase II (WPII) LOS

3.1.2.5.11 Percentage of Geographic Area Served by 911 Authorities that are Limited to Providing Wireless Phase II (WPII) LOS

Data Element Number	3.1.2.5.11
Name	Percentage of Geographic Area Served by 911 Authorities that are Limited to Providing Wireless Phase II (WPII) LOS
DEName	LOSLandWPHII
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of geographic area served by 911 Authorities that provide Wireless Phase II LOS. NENA defines Wireless Phase II as, “Required by FCC Report and Order 96-264 pursuant to Notice of Proposed Rulemaking (NPRM) 94-102. The delivery of a wireless 911 call with Phase I requirements, plus location of the caller within 125 meters 67% of the time and Selective Routing based upon

[14] Ibid., p. 136.

	those coordinates. Subsequent FCC rulings have redefined the accuracy requirements."[15]
Instructions	Responding "100" means the entire geographic area is served only by Wireless Phase II LOS. Responding "0" means none of the geographic area is served only by Wireless Phase II LOS.
Question to User	Enter the percentage of geographic area served by 911 Authorities that provide Wireless Phase II (WPII) LOS as the Highest LOS Available

3.1.2.5.12 Percentage of Geographic Area Served by 911 Authorities that Provide Enhanced 911 LOS for VoIP

Data Element Number	3.1.2.5.12
Name	Percentage of Geographic Area Served by 911 Authorities that Provide Enhanced 911 LOS for VoIP
DEName	LOSLandVoIP
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Percentage of geographic area served by 911 Authorities that provide E911 LOS to VoIP users. NENA defines VoIP as, "Provides distinct packetized voice information in digital format using the Internet Protocol. The IP address assigned to the user's telephone number may be static or dynamic."[16] This category assumes the 911 Authority provides a LOS that includes E911 for landline subscribers, Wireless Phase I and II to wireless subscribers.
Instructions	Responding "100" means the entire geographic area is served only by E911 LOS to VoIP users. Responding "0" means none of the geographic area is served by E911 LOS to VoIP users.
Question to User	Enter the percentage of geographic area served by 911 Authorities that provide Enhanced 911 LOS for VoIP

3.1.2.6 State Adoption of its Own Common Definitions for Each LOS

Data Element Number	3.1.2.6
Name	State Adoption of its Own Commonly Used Definitions for Each LOS
DEName	LOSNatStand
Data Type	Bit
Size (bytes)	1
Form Input Type	Drop-down List (Yes or No)
Definition	This element asserts that a State has adopted its own commonly used definitions for LOS categories
Instructions	Respond yes or no depending on if your State has adopted commonly used definitions for LOS categories
Question to User	Has your State adopted its own commonly used definitions for each level of service?

[15] Ibid., p. 137.
[16] Ibid., p. 134.

3.1.2.7 State Adoption of Nationally Standardized Service Level Definitions

Data Element Number	3.1.2.7
Name	State Adoption of Nationally Standardized Service Level Definitions
DEName	NatDefReport
Data Type	Bit
Size (bytes)	1
Form Input Type	Drop-down List (Yes or No)
Definition	This element asserts that the State has utilized nationally standardized service level definitions
Instructions	Respond yes or no depending on if your State has adopted nationally standardized definitions for LOS categories
Question to User	Has your State utilized nationally standardized definitions for each level of service?

3.1.2.8 Data Element Sub-Group: Total Number of Primary and Secondary PSAPs within a State

3.1.2.8.1 Total Number of Primary PSAPs within a State

Data Element Number	3.1.2.8.1
Name	Total Number of Primary PSAPs within a State
DEName	PrimaryPSAPs
Data Type	Int
Size (bytes)	4
Form Input Type	Textbox (valid number between 0 and 9,999)
Definition	NENA defines a primary PSAP as, "A PSAP to which 911 calls are routed directly from the 911 Control Office."[17]
Instructions	Number of primary PSAPs within a State
Question to User	Enter the number of primary PSAPs within your State

3.1.2.8.2 Total Number of Secondary PSAPs within a State

Data Element Number	3.1.2.8.2
Name	Total Number of Secondary PSAPs within a State
DEName	SecondaryPSAPs
Data Type	Int
Size (bytes)	4
Form Input Type	Textbox (valid number between 0 and 9,999)
Definition	NENA defines a secondary PSAP as, "A PSAP to which 911 calls are transferred from a Primary PSAP."[18]
Instructions	Number of secondary PSAPs within a State
Question to User	Enter the number of secondary PSAPs within your State

[17] Ibid., p. 98.
[18] Ibid., p. 109.

3.1.3 Data Element Group: Financial Data

3.1.3.1 Financial Data Reporting Period Type

Data Element Number	3.1.3.1
Name	Financial Data Reporting Period Type
DEName	FinancialDataPeriodType
Data Type	Varchar(50)
Size (bytes)	50
Form Input Type	Drop-down List (Calendar or Fiscal Year)
Definition	Identifies the type of reporting period for which the reported financial data applies (i.e., calendar year, fiscal year, or where the calendar year is the fiscal year). This will provide context for the evaluation of reported data.
Instructions	Select the reporting period type. Responding “calendar year” means your reporting period runs from January 1 through December 31. Responding “Fiscal Year” means your state’s reporting period starts on some other date other than January 1 (e.g., July 1).
Question to User	Select the type of reporting period your State uses for reporting financial data

3.1.3.2 Annual Revenue for All 911 Authorities

Data Element Number	3.1.3.2
Name	Annual Revenue for All 911 Authorities
DEName	AnnualRevenues
Data Type	Decimal(15,2)
Size (bytes)	9
Form Input Type	Textbox (Currency between 0 and 99,999,999.99, allowing two decimal places)
Definition	Total annual revenue for the current reporting year (2015) for all 911 Authorities in a State (local, county, regional, and State) derived from all sources, including, but not limited to 911 surcharges or service fees, and aggregated to the State level.
Instructions	Identify the total annual revenue
Question to User	Enter the total annual revenue (e.g., special emergency communications taxes, agency fees) for the current reporting year (2015) for all 911 Authorities within your State

3.1.3.2.1 Annual Revenue by 911 Authority Source

Data Element Number	3.1.3.2.1
Name	Annual Revenue by 911 Authority Source
DEName	AnnualRevenuesSources
Data Type	Varchar(MAX)
Size (bytes)	N/A

Form Input Type	Textbox (Free-text entry)
Definition	Identifies the source(s) of annual revenue for the current reporting year (2015) for all 911 Authorities in a State (local, county, regional, and State), including, but not limited to 911 surcharges or service fees, and aggregated to the State level.
Instructions	This element requests reporting entities to identify in text form those basic sources of revenue contributing to data element 3.1.3.2 above. Such sources include, but are not limited to: dedicated 911 surcharges or service fees, local, non-dedicated (general) revenue, grant funds.
Question to User	Enter sources of the total annual revenue for the current reporting year (2015) for all 911 Authorities within your State

3.1.3.3 Estimated Annual Costs by 911 Authority

Data Element Number	**3.1.3.3**
Name	Estimated Annual Costs by 911 Authority
DEName	AnnualCosts
Data Type	Decimal(15,2)
Size (bytes)	9
Form Input Type	Textbox (Currency between 0 and 99,999,999.99, allowing two decimal places)
Definition	Estimated total annual costs for the current reporting year (2015) for all 911 Authorities in a State (local, county, regional, and State), aggregated to the State level
Instructions	Identify the estimated total annual costs
Question to User	Enter the estimated total annual costs for the current reporting year (2015) for all 911 Authorities within your State

3.2 Progress Benchmarks

"Progress benchmarks" reflect the status of State efforts to implement advanced next generation 911 systems and capabilities. As titled, these data elements are largely implementation or deployment benchmarks against which progress can be measured. The elements involved are grouped in a logical order of planning, procurement, installation and testing, transition, and operations. Planning through testing elements reflects both State level and sub-State level activity and efforts. Transitional and operational elements specifically represent the latter.19

3.2.1 Data Element Group: Planning

3.2.1.1 Statewide NG911 Plan Adopted

Data Element Number	3.2.1.1
Name	Statewide NG911 Plan Adopted
DEName	SystemArchitecture
Data Type	Bit
Size (bytes)	1
Form Input Type	Drop-down List (Yes or No)
Definition	Identify whether or not your State developed and adopted a statewide NG911 Plan, including governance, funding, system components (IP network, Emergency Services IP network (ESInet), NG911 software services, security architecture, user identity management, database architecture, and PSAP configuration), and operations; and currently has such a plan in place, regardless of when the plan was developed or adopted. NENA defines NG911 as, "an Internet Protocol (IP)-based system comprised of managed Emergency Services IP networks (ESInets), functional elements (applications), and databases that replicate traditional E911 features and functions and provides additional capabilities. NG911 is designed to provide access to emergency services from all connected communications sources, and provide multimedia data capabilities for PSAPs and other emergency service organizations."[20]
Instructions	Responding "Yes" indicates that your statewide NG911 Plan includes these components. Responding "No" or "Unknown" means your State does not include these components (i.e., one or more components are missing).
Question to User	Has your State developed and adopted a statewide NG911 Plan to include governance, funding, system components (IP network, ESInet, NG911 software services, security architecture, user identity management, database architecture, and PSAP configurations), and operations?

[19] Ibid, p.7.
[20] Ibid., p. 90.

3.2.1.2 Sub-State 911 Authority NG911 Plan Adopted

Data Element Number	3.2.1.2
Name	Sub-State 911 Authority NG911 Plan Adopted
DEName	SystemArchitectureNumber
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Number between 0 and 100, allowing two decimal places)
Definition	Indicate the number of regional or local 911 Authorities within the State who have developed and adopted NG911 Plans for their area and currently has such a plan in place, regardless of when the plan was developed or adopted.
Instructions	Enter the number of regional or local 911 Authorities within your State who have defined a NG911 Plan (using the components outlined in data element 3.2.1.1) for their area. This question is intended to differentiate between States that have a Statewide NG911 Strategic Plan versus where some sub-state areas (regions or counties) have developed their own NG911 Strategic Plans.
Question to User	Enter the number of regional or local 911 Authorities within your State who have developed and adopted NG911 Plans for their area independent of the State

3.2.1.3 Statewide NG911 Concept of Operations Developed

Data Element Number	3.2.1.3
Name	Statewide NG911 Concept of Operations Developed
DEName	ConceptOfOperations
Data Type	Bit
Size (bytes)	1
Form Input Type	Drop-down List (Yes or No)
Definition	Is there a statewide NG911 Concept of Operations document, including operations for NG911 and related architecture? A Concept of Operations (CONOPS) is a user-oriented document that describes the desired characteristics for a proposed system from a user's perspective and how its implementation will enhance the user's current operation. The CONOPS would include, for example: • User-oriented operational description for NG911 and related architecture • Operational needs and use cases • System overview and desired outcomes of users deploying the system • Clear statement of responsibilities and authorities delegated
Instructions	Enter yes if your State has developed a Concept of Operations document, regardless of the date the document was developed
Question to User	Has your State established a statewide Concept of Operations document, including operations for NG911 and related architecture?

3.2.1.4 Sub-State 911 Authority Concept of Operations Developed

Data Element Number	3.2.1.4
Name	Sub-State 911 Authority Concept of Operations Developed
DEName	ConceptOfOperationsPercent
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Number between 0 and 100, allowing two decimal places)
Definition	Indicate the number of regional or local 911 Authorities within the State who have developed a concept of operations for their area.
Instructions	Enter yes if your sub-State 911 Authorities has developed a Concept of Operations document, regardless of the date the document was developed
Question to User	Enter the number of regional or local 911 Authorities within your State who have developed an NG911 concept of operations for their area

3.2.2 Data Element Group: Procurement

3.2.2.1 Statewide Request for Proposal (RFP) Released

Data Element Number	3.2.2.1
Name	Statewide Request for Proposal (RFP) Released
DEName	RequestForProposal
Data Type	Bit
Size (bytes)	1
Form Input Type	Drop-down List (Yes or No)
Definition	Identifies whether a State has, at any point in the past, released an RFP for defined statewide components, such as ESInet or State entry Emergency Services Routing Proxy (ESRP) capability, or for a statewide NG911 system. The element is not predicated on the procurement of a "complete" NG911 system. Instead, it tests any level or component of NG911, including i3 procurement.
Instructions	"Level or component" in this context is defined below. Reporting entities are asked to indicate whether procurement has commenced for any one of the four basic levels or components described. For further definitional detail regarding the examples involved, see http://www.nena.org/resource/collection/625EAB1D-49B3-4694-B037-8E854B43CA16/NENA-ADM-000.17_Master_Glossary_20130909.pdf. 1. Basic IP Network (general purpose, common to any outsourced IP network). Examples include: • Routers: every IP network is the routers and the links between the routers • Firewalls • Domain Name System (DNS) servers • Dynamic Host Configuration Protocol (DHCP) servers • Time/clock servers • Email servers

	• Possibly Web servers 2. ESInet (hardware, software, databases unique to an Emergency Services IP Network, supports specific emergency services applications, whether it supports NG911 or not). Examples include: • "Forest Guide"[21] • Emergency Call Routing Function (ECRF) • "Agency locator" functions 3. NG911 Applications (e.g., hardware, software, databases unique or necessary to NG911 services). Examples include: • Location Validation Function (LVF) • PSAP and other emergency agencies credentialing authority (core service) • Emergency entity name/IP address service • Data/service rights management (core service) • Logging services (system wide, from gateways and Border Control Functions [BCF] through PSAPs and other emergency entities) • Emergency service routing proxies (ESRPs) • Geographic Information Systems (GIS) - provides validation and routing data layer info to Location-to-Service Translation Protocol (LoST) Servers • Bridging services • Authentication service (core service) • Policy store/editor • The rest of the BCF (not included with the firewall) 4. NG911 Transition components. Examples include: • Legacy service gateway • Legacy PSAP gateway • Legacy SR gateway (where legacy services enter NG911 via Service Provider switches operating as selective routers, either partially or fully as tandems or, in past time frames
Question to User	Has your State released an RFP for defined statewide NG911 components at any point in the past?

3.2.2.2 911 Authority RFP Released

Data Element Number	3.2.2.2
Name	911 Authority RFP Released
DEName	RequestForProposalNumber
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Number between 0 and 100, allowing two decimal places)
Definition	Identifies the number of regional or local 911 Authorities within your State who have released an RFP for NG911 components for their area, regardless of the date the RFP was released.

[21] A "forest guide" is a resource containing knowledge of the coverage areas or regions associated with groups of authoritative mapping servers supporting a specific service (in this case, emergency communications).

Instructions	Requires states to collect sub-State status data associated with such activity. A "component or level" in this context is defined in data element 3.2.2.1 above.
Question to User	Enter the number of regional or local 911 Authorities within your State who have released an RFP for NG911 components for their area, regardless of the date the RFP was released.

3.2.2.3 Statewide Components Specified for Procurement

Data Element Number	3.2.2.3
Name	Statewide Components Specified for Procurement by State
DEName	ProcuredComponents
Data Type	Varchar(MAX)
Size (bytes)	N/A
Form Input Type	Textbox (Free-text entry up to 2,147,483,647 characters)
Definition	Based upon a positive response to element 3.2.2.1, this element provides detail on what parts, functions, or components for NG911 have been procured to date. Parts, functions, or components are described in data element 3.2.2.1 above.
Instructions	Reporting entities are requested to select one of the four levels described that represents the functional category of procurement involved
Question to User	If the response to 3.2.2.1 is "Yes," list which parts, functions, or components of NG911 have been procured in your State.

3.2.2.4 Sub-State 911 Authority Components Being Procured

Data Element Number	3.2.2.4
Name	Sub-State 911 Authority Components Being Procured
DEName	ProcuredComponentsAuth
Data Type	Varchar(MAX)
Size (bytes)	N/A
Form Input Type	Textbox (Free-text entry up to 2,147,483,647 characters)
Definition	Based upon sub-State 911 Authorities within a reporting State that have released RFPs (see element 3.2.2.2), this element requests states to summarize what parts, functions, or components for NG911 have been procured to date by regional or local 911 Authorities. Said parts, functions, or components are described in data element 3.2.2.1 above.
Instructions	Reporting entities are requested to select one of the four levels described that represents the functional category of procurement involved.
Question to User	If the response to 3.2.2.1 is "Yes," list which parts, functions, or components of NG911 have been procured by regional or local 911 Authorities within your State.

3.2.2.5 Captures whether a State Contract for the NG911 Part, Function, or Component Identified Above Has Been Awarded

Data Element Number	3.2.2.5
Name	Captures whether a State Contract for the NG911 Part, Function, or Component Identified Above Has Been Awarded either during survey year or earlier
DEName	ContractAwarded
Data Type	Bit
Size (bytes)	1
Form Input Type	Drop-down List (Yes or No)
Definition	This data element specifically relates to the detail identified by data element 3.2.2.3 (i.e., the NG911 part, function, and/or component acknowledged), and solicits a “yes” or “no” response.
Instructions	Parts, functions, or components are described in data element 3.2.2.1 above.
Question to User	Has your State awarded contracts for the procured components and/or functions defined in 3.2.2.3 either during this survey year or earlier?

3.2.2.6 Number of 911 Authorities Statewide that Have Awarded a Contract for these System Components, Parts, and/or Functions

Data Element Number	3.2.2.6
Name	Number of 911 Authorities Statewide that Have Awarded a Contract for these System Components, Parts, and/or Functions either during survey year or earlier
DEName	ContractAwardedNumber
Data Type	Decimal (9,2)
Size (bytes)	5
Form Input Type	Textbox (Number between 0 and 100, allowing two decimal places)
Definition	This data element is the sub-State counterpart to the data element 3.2.2.5, and speaks to similar regional and local effort. The number involved is calculated against the total number of 911 Authorities in a State, as reported in Section 3.1.2.3.
Instructions	Reporting this data element does require (or depend upon) a State reporting entity collecting such data from sub-State 911 Authorities. Parts, functions, or components are described in data element 3.2.2.1 above.
Question to User	Enter the number of 911 Authorities within your State that have awarded a contract of the system components and/or functions procured in 3.2.2.3 either during this survey year or earlier

3.2.2.7 Statewide Installation and Testing

Data Element Number	3.2.2.7
Name	Statewide Installation and Testing
DEName	InstallTest
Data Type	Bit
Size (bytes)	1

Form Input Type	Drop-down List (Yes or No)
Definition	This data element specifically relates to the contract detail identified above, and solicits a “yes” or “no” response (i.e., it is asking reporting states to indicate whether the NG911 part, function, and/or component involved has been installed/deployed and tested), regardless of when the part, function, and/or component was installed and tested. From that, a list of states that reported they have met this milestone can be generated.
Instructions	This is keyed to the procurement involved. What is being deployed may vary from a simple NG911 component or function, to full NG911 services provided by a third-party service provider. Said parts, functions, or components are described in data element 3.2.2.1 above.
Question to User	Has the NG911 part, function, and/or component defined in 3.2.2.3 been installed/deployed and tested at the State level, regardless of when the part, function, and/or component was installed and tested?

3.2.2.8 Number of Sub-State 911 Authorities Statewide that Have Installed and Tested These System Components, Parts, and/or Functions

Data Element Number	**3.2.2.8**
Name	Number of Sub-State 911 Authorities Statewide that Have Installed and Tested These System Components, Parts, and/or Functions
DEName	InstallTestNumber
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Number between 0 and 100, allowing two decimal places)
Definition	This is the sub-State counterpart to data element 3.2.2.7, and speaks to similar regional and local effort. The number involved is calculated against the total number of 911 Authorities in a State, as reported in Section 3.1.2.3.
Instructions	Reporting this data element does require (or depend upon) a State reporting entity collecting such data from sub-State 911 Authorities. Said parts, functions, or components are described in data element 3.2.2.1 above.
Question to User	Enter the number of sub-State 911 Authorities within your State that have installed/deployed and tested the components and/or functions defined in 3.2.2.3

3.2.2.9 Data Element Sub-Group: Agreements (Capacity and Service Level) that Have and Have Not Been Reached with Originating Service Providers

3.2.2.9.1 List of Service Providers with Whom Capacity and Service Level Agreements for NG911 Have Been Reached

Data Element Number	**3.2.2.9.1**
Name	List of Service Providers With Whom Capacity and Service Level Agreements for NG911 Have Been Reached
DEName	ProviderAgreements
Data Type	Varchar(MAX)
Size (bytes)	N/A

Form Input Type	Textbox (Free-text entry up to 2,147,483,647 characters)
Definition	The data element asks reporting states to provide a list of service providers with whom signed agreements have been reached for each State (or appropriate jurisdiction), where such agreements are necessary to ensure consistent and reliable NG911 service
Instructions	This element may also require states to gather supporting information from sub-State 911 Authorities, depending upon the State 911 institutional environment involved. Enter information in a list with commas between entries.
Question to User	Provide a list of service providers that have executed agreements with your State. Enter information with comma or carriage returns below.

3.2.2.9.2 List of Service Providers With No Capacity nor Service Level Agreements In Place

Data Element Number	3.2.2.9.2
Name	List of Service Providers With No Capacity nor Service Level Agreements In Place
DEName	ProviderNoAgreements
Data Type	Varchar(MAX)
Size (bytes)	N/A
Form Input Type	Textbox (Free-text entry up to 2,147,483,647 characters)
Definition	This data element asks states to provide a list of service providers with whom no agreements (capacity or service level) are in place. This will vary from State to State. Data included from this element will be used to help identify states that are having difficulty with certain carriers/providers.
Instructions	Enter information with commas between entries
Question to User	Provide a list of service providers that have not executed agreements (capacity or service level) with your State. Enter information with comma or carriage returns below.

3.2.3 Data Element Group: Transition

3.2.3.1 Percentage of NG911 Authority Systems that Can Process and Interpret Location and Caller Information

Data Element Number	3.2.3.1
Name	Percentage of NG911 Authority Systems that Can Process and Interpret Location and Caller Information
DEName	IPProcessInfoPercent
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	This data element reflects the percentage of 911 Authority systems in each State that are capable of processing NG911 emergency calls for all service types (wireline, wireless, VoIP) using NG911 infrastructure (NG911 capable means infrastructure and Geographic Information Systems [GIS]). Specifically, this is the percentage of total 911 Authorities in a State that have implemented

	NG911 systems for all service types. Systems not being converted would not factor into this element.
Instructions	Based on the exception percentage of not fully capable systems, this data element may help (indirectly) identify certain calling modes that may need changes or enhancements to be able to provide full featured emergency calling.
Question to User	Enter the percentage of NG911 Authority systems that are capable of processing and interpreting location and caller information within your State

3.2.3.2 Percentage of the Total State Population Served by NG911 Capable Services

Data Element Number	**3.2.3.2**
Name	Percentage of the Total State Population Served by NG911 Capable Services
DEName	PopServedByIPPercent
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Similar to data element 3.2.3.1, this element reflects the percentage of the population for a reporting State served by IP-capable 911 services meeting industry-accepted definitions for NG911. Note, using NENA's i3 standard alone is not the same as an NG911 system. The i3 standard only describes the network, components, and interfaces required to establish NG911 service. To deploy a "full function" NG911 system, states will need equipment and software vendors, access network providers, and originating service providers, all elements not included in the i3 standard.
Instructions	Based on the exception percentage of not fully capable systems, this data element may help (indirectly) identify certain calling modes that may need changes or enhancements to be able to provide full featured emergency calling.
Question to User	Enter the percentage of population served by IP-capable 911 within your State

3.2.3.3 Percentage of the Geographical Area of a State Served by NG911 Capable Services

Data Element Number	**3.2.3.3**
Name	Percentage of the Geographical Area of a State Served by NG911 Capable Services
DEName	AreaServedByIPPercent
Data Type	Decimal(9,2)
Size (bytes)	5
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	Similar to data element 3.2.3.2, this data element specifically reflects the percentage of geographic area served (as opposed to population) by NG911 services. Data from this will help differentiate progress for those jurisdictions that have dense urban populations, and reflect IP-capable 911 services meeting industry-accepted definitions for NG911. They may be serving a large percentage of the population but may be serving a very small geographic portion of the State. This metric could indirectly help gauge progress for rural areas.

Instructions	Based on the exception percentage of not fully capable systems, this data element may help (indirectly) identify certain calling modes that may need changes or enhancements to be able to provide full featured emergency calling.
Question to User	Enter the percentage of geographical area where PSAPs receive IP-delivered 911 calls within your State

3.2.4 Data Element Group: Operations

3.2.4.1 Percentage of PSAPs receiving calls through an ESInet

Data Element Number	**3.2.4.1**
Name	Percentage of PSAPs receiving calls through an ESInet
DEName	IPOperationalPSAPPercent
Data Type	Decimal(9,2)
Size (bytes)	X
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	This question is designed to track the progress of ESInet deployments and PSAP connectivity to ESInets for call delivery. This includes PSAPs that are receiving IP calls from an ESInet, but have a Legacy PSAP Gateway (LPG) converting the calls back into analog to be processed by the CPE.
Instructions	Please list the percentage of your primary PSAPs that are receiving calls from an ESInet. Example: 20 primary PSAPs receiving calls from an ESInet out of 40 total primary PSAPs = 50%
Question to User	Enter the percentage of ESInet connected PSAPs in your State out of the total number of Primary PSAPs in your State.

3.2.4.2 Percentage of PSAPs that process IP calls with their CPE

Data Element Number	**3.2.4.2**
Name	Percentage of PSAPs that process IP calls with their CPE
DEName	IPOperationalCPEPercent
Data Type	Decimal(9,2)
Size (bytes)	X
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	This question is designed to track how many primary PSAPs are processing IP emergency requests (calls) into their CPE directly (without conversion back to analog) from an ESInet.
Instructions	Please list the percentage of your primary PSAPs that have CPE equipment receiving calls from an ESInet and process those IP calls without needing to be converted to analog. Example: 5 primary PSAPs receiving calls from an ESInet that have CPE processing the IP calls out of 40 total primary PSAPs = 12.5%
Question to User	Enter the percentage of primary PSAPs that have CPE processing IP calls from an ESInet out of the total number of Primary PSAPs in your State.

3.2.4.3 Number of Operational ESInets deployed within the State

Data Element Number	3.2.4.3
Name	Number of Operational ESInets deployed within the State
DEName	ESInetDeployment
Data Type	Decimal(9,2)
Size (bytes)	X
Form Input Type	Textbox (Number between 0 and 100, allowing two decimal places)
Definition	The number of ESInets deployed and operational within the State that are delivering IP calls to primary PSAPs. NENA[22] defines an ESInet as a managed IP network that is used for emergency services communications, and which can be shared by all public safety agencies. It provides the IP transport infrastructure upon which independent application platforms and core functional processes can be deployed, including, but not restricted to, those necessary for providing NG9-1-1 services. ESInets may be constructed from a mix of dedicated and shared facilities. ESInets may be interconnected at local, regional, State, federal, national and international levels to form an IP-based inter-network (network of networks).
Instructions	This includes statewide or regional/locally deployed ESInets. If you have one statewide ESInet, your answer should be "1"
Question to User	Enter the total number of operational ESInets deployed within your State

3.2.4.4 Percentage of the Master Street Address Guide (MSAG) to Geographic Information System (GIS) Data Synchronization Progress

Data Element Number	3.2.4.4
Name	Percentage of the MSAG to GIS Data Synchronization Progress
DEName	MSAGtoGISprogress
Data Type	Decimal(9,2)
Size (bytes)	X
Form Input Type	Textbox (Percentage between 0 and 100, allowing two decimal places)
Definition	The percentage of all the civic addresses in the State that have been geocoded into geospatial points. This occurs by synchronizing the Master Street Address Guide (MSAG) civic addresses to a Geographic Information System (GIS) geospatial database of road centerlines, site / structure locations, and related spatial databases. Converting civic addresses into GIS information enables NG911 systems to geospatially route calls and is necessary for other NG911 services.
Instructions	This is relative to the total number of civic address authorities in the State. Example: 20 of the 40 MSAG authorities in my State have converted their addresses into a GIS format and have synced the data with their MSAG data. Answer = 50%
Question to User	Enter the percentage of address authorities within your State that have geocoded their addresses to a GIS ready format

[22] NENA Master Glossary of 911 Terminology, NENA ADM-000.17, September 9, 2013, p. 98, http://c.ymcdn.com/sites/www.nena.org/resource/collection/625EAB1D-49B3-4694-B037-8E854B43CA16/NENA-ADM-000.17_Master_Glossary_20130909.pdf.